

# Cancer

The body's cells are constantly                      and                      . Most new cells are normal, but some are not. Sometimes these abnormal cells reproduce                      and                      , forming                      of abnormal cells inside otherwise normal tissue. This *uncontrollable growth of abnormal cells* is called                      .

## How Cancer Harms the Body

*An abnormal mass of tissue that has no natural role in the body* is called a                      . Some tumors are                      , or noncancerous. Benign tumors grow                      and are surrounded by                      that prevent them from spreading from the                      site. Although noncancerous tumors don't                      , they can be dangerous if they interfere with normal body                      . For example, a benign brain tumor may block the brain's blood supply.

Tumors that are                      , or *cancerous*, spread to neighboring                      and through the                      \_ or lymph to other parts of the body. The *spread of cancer from the point where it originated to other parts of the body* is called                      . As cancer cells spread throughout the body, they divide and form                      tumors.

Many cancers                      the body because they                      normal cells when they                      with them for                      . Tumors put                      on surrounding tissues and organs,                      with body function. They can also                      arteries, veins, and other passages in the body.

## Types of Cancer

Cancer can develop in almost any                      of the body and in                      tissues of each part. The chart below shows some types of cancers, grouped according to the body organs where they first develop. Cancers also can be classified according to the tissues they affect.

Name of Cancer	Tissues it affects
	cancers of the immune system
	cancers of the blood-forming organs.
	cancers of the glands and body linings, including the skin and the linings of the digestive tract and lungs
	cancers of connective tissue, including bones, ligaments, and muscle

## Risk Factors for Cancer

Abnormal cells that have the \_\_\_\_\_ to become cancer cells are produced \_\_\_\_\_ day and the immune system \_\_\_\_\_ most of them. If the immune system becomes \_\_\_\_\_ or the number of cancer cells becomes \_\_\_\_\_, cancer may develop. In some cases normal cells \_\_\_\_\_ by themselves. In others a faulty \_\_\_\_\_ may have been \_\_\_\_\_; between 5 to 10 percent of cancers are hereditary.

The majority of cancers are caused by \_\_\_\_\_ to certain factors that increase the risk of cell \_\_\_\_\_. One factor is a \_\_\_\_\_, *a cancer-causing substance*. Examples of carcinogens are cigarette smoke and ultraviolet light. Several \_\_\_\_\_ risk factors for cancer are \_\_\_\_\_ with lifestyle behaviors. It is estimated that about \_\_\_\_\_ % of all cancers can be prevented through healthy \_\_\_\_\_ choices.

### Tobacco Use

Tobacco use is the major cause of cancer deaths in the United States and the most \_\_\_\_\_. Recent studies attribute nearly \_\_\_\_\_ in \_\_\_\_\_ deaths to smoking or exposure to \_\_\_\_\_ smoke. About \_\_\_\_\_ % of lung cancer deaths are caused by smoking. An additional \_\_\_\_\_ % of females who smoke will die of other smoking-related diseases. Tobacco use also increases the risk of \_\_\_\_\_, pancreas, and \_\_\_\_\_ cancers. At least \_\_\_\_\_ different carcinogens have been identified in tobacco and tobacco smoke.

Smokeless tobacco use is a major risk factor in the development of \_\_\_\_\_ cancer, which affects the \_\_\_\_\_, mouth, and \_\_\_\_\_. Oral cancer kills roughly \_\_\_\_\_ person every \_\_\_\_\_. You can greatly reduce your risk of cancer by avoiding all forms of tobacco as secondhand smoke.

### Sexually Transmitted Diseases

Some viruses, such as the \_\_\_\_\_ (HPV) and the \_\_\_\_\_ B virus, cause \_\_\_\_\_ and \_\_\_\_\_ cancers, respectively. The risk of acquiring these \_\_\_\_\_ can be reduced by \_\_\_\_\_ from sexual activity and from injecting \_\_\_\_\_ through infected needles.

## Dietary Factors

Approximately % of all cancer deaths are caused by dietary risk factors. A diet that is high in and low in is often linked with cancer. make colon cells more susceptible to carcinogens. Colon cells divide rapidly if the diet is high in fat, increasing the that abnormal cells will form. Choosing foods low in fat and high in fiber reduces the risk of , breast, and cancers. Dietary fiber the movement of waste through the intestines, so carcinogens have less time to on cells.

## Radiation

(UV) radiation from the sun is the main cause of cancer, tanning beds and also emit UV radiation, which is just as damaging as the sun's rays. A “ ” is the body's response to being by UV rays.

About % of skin cancers can be prevented. Reduce your to UV light by avoid tanning beds and sunlamps. your time in the sun, especially between am and pm. When you must be in the sun, wear protective clothing and use a sunscreen that has an (Sun Protection Factor) of at least and that blocks all types of UV radiation. Pay attention to your skin, one of the seven warning signs of cancer listed in the double framed box.

### A word of CAUTION about Cancer

The American Cancer Society recommends that every individual should be alert to the seven warning signs of cancer. Note that their first letters, when combined, spell the word *CAUTION*.

C

(either loose stools or constipation)

A

U

(as from the uterus, bladder, bowels, nipple, or with coughing)

T

(Let your health care provider decide what the lump means.)

I

O

N

Other symptoms include fatigue and unexplained weight loss. The presence of these signs does not necessarily mean a person has cancer. If you experience any of these symptoms, contact a health care professional.

## ABC's of Skin Cancer

Simple rules of thumb to determine if a skin abnormality should be of serious concern



Most early melanomas are asymmetrical: a line through the middle would not create matching halves. Common moles are round and symmetrical.



The borders of early melanomas are often uneven and may have scalloped or notched edges. Common moles have smoother, more even borders.



Common moles usually are a single shade of brown. Varied shades of brown, tan, or black are often the first sign of melanoma. As melanomas progress, the colors red, white and blue may appear.



Early melanomas tend to grow larger than common moles - generally to at least the size of a pencil eraser (about 6mm, or 1/4 inch, in diameter).

When raised off the level of the rest of the skin combined with any of the other signs should raise a flag of concern. Have your physician check it out next time you seek medical care.

## Reducing Your Risk

You can't control some risk factors for cancer, such as heredity, but you can reduce your risk by practicing the healthful behaviors list below.

### How Can You Reduce Your Risk of Cancer

1.
  - Hepatitis B can cause liver cancer, and HPV can cause cancers of the reproductive organs.
- 2.
- 3.
4.
  - Include 2-4 servings of fruits and 3-5 servings of vegetables every day. These foods are good sources of fiber, and some contain compounds that act against carcinogens.
- 5.
6.
  - Tobacco is the single major cause of cancer death in the United States. Excess alcohol increases the risk of several types of cancer, including mouth and throat cancer.
7.
  - Do regular self-exams to detect cancer early.

## Detecting and Treating Cancer

Many            have been made in the early detection and treatment of cancer, and many more people are            with the disease than ever before. The            rate for those with cancer            on the type of cancer and how            it is detected.

Early detection is the most            factor in successful treatment. Many types of cancer can be detected through            of the breasts, testes, and skin.

Screening for cancer is examination or testing for early            of cancer even though a person has no            . Medical screenings can result in early detection of about            of all new cancer cases each year. The current five-year survival rate with early detection is about            % With regular screenings, the rate could increase to            %.

If cancer is a possibility, a            , *the removal of a small piece of tissue for examination*, may be performed. A biopsy is usually necessary to            whether cancer is present. X rays and other imaging techniques help determine a tumor's            and            .

## Treating Cancer

The methods used to treat cancer depend on several factors, such as \_\_\_\_\_ of cancer, whether the tumor has \_\_\_\_\_, and the patient's \_\_\_\_\_ and \_\_\_\_\_. Treatment might include one or more of the following:

- \_\_\_\_\_ removes some or all of the cancerous masses from the body.
- \_\_\_\_\_ aims rays from radioactive substances at cancerous cells. The radiation kills the cells and shrinks the cancerous mass.
- \_\_\_\_\_ uses chemicals to destroy cancer cells.
- \_\_\_\_\_ activates a person's immune system to recognize specific cancers and destroy them.
- \_\_\_\_\_ involves using medicines that interfere with the production of hormones. These treatments kill cancer cells or slow their growth.

Cancer that \_\_\_\_\_ to treatment or is under control is said to be in \_\_\_\_\_, *a period of time when symptoms disappear*. Cancer in remission is not always \_\_\_\_\_; it can \_\_\_\_\_, sometimes \_\_\_\_\_ later.